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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,208	09/08/2003	Martin Fischer	7781.0086-00	7499

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EXAMINER

MORRISON, JAY A

ART UNIT	PAPER NUMBER
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2168

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/656,208	Applicant(s) FISCHER ET AL.	
	Examiner Jay A. Morrison	Art Unit 2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/30/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-26 are pending.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7,15-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The cited claims do not produce a tangible result. The claims do not recite a practical application by producing a physical transformation or producing a useful, concrete, and tangible result. To perform a physical transformation, the claimed invention must transform an article or physical object into a different state or thing. Transformation of data is not a physical transformation. A useful, concrete, and tangible result must be either specifically recited in the claim or flow inherently therefrom. To be useful the claimed invention must establish a specific, substantial, and credible utility. To be concrete the claimed invention must be able to produce the same results given the same initial starting conditions. To be tangible the claimed invention must produce a practical application or real world result. In this case the claims fail to perform a physical transformation because the claims are directed to operating on data. The claims are useful and concrete, but they fail to produce a tangible result because neither the function nor any

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results are stored in non-volatile media or, for example, made tangible by being returned to a user.

Additionally, the claims are directed towards a method for controlling access, however the limitations are directed towards abstract ideas that does not accomplish the method as stated in the preamble.

As per claims 15-21, this claim clearly recites a "machine readable medium", which may comprise "propagation medium". However these data signals are not tangible, and cannot tangibly embody a computer program or process since a computer cannot understand/realize (i.e. execute) the computer program or process when embodied on the data signal. Computer program or processes are only realized within the computer when stored in a memory or storage element. Therefore, a data signal does not meet the "useful, concrete, and tangible" requirement as set forth in *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601-02, and hence claims 25-32 are non statutory under 35 U.S.C. 101.

Additionally, because data signals, being a form of electromagnetic energy, do not fall into one of the statutory categories of 35 U.S.C. 101, the claim includes non-statutory subject matter. A detailed explanation describing why carrier waves are regarded as non-statutory subject matter under 35 U.S.C. 101 follows:

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. *O'Reilly*, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101.

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First, a claimed signal is clearly not a "process" under § 101 because it is not a series of steps. The other three § 101 classes of machine, compositions of matter and manufactures "relate to structural entities and can be grouped as 'product' claims in order to contrast them with process claims." 1 D. Chisum, Patents § 1.02 (1994). The three product classes have traditionally required physical structure or material.

"The term machine includes every mechanical device or combination of mechanical device or combination of mechanical powers and devices to perform some function and produce a certain effect or result." *Corning v. Burden*, 56 U.S. (15 How.) 252, 267 (1854). A modern definition of machine would no doubt include electronic devices which perform functions. Indeed, devices such as flip-flops and computers are referred to in computer science as sequential machines. A claimed signal has no physical structure, does not itself perform any useful, concrete and tangible result and, thus, does not fit within the definition of a machine.

A "composition of matter" "covers all compositions of two or more substances and includes all composite articles, whether they be results of chemical union, or of mechanical mixture, or whether they be gases, fluids, powders or solids." *Shell Development Co. v. Watson*, 149 F. Supp. 279, 280, 113 USPQ 265, 266 (D.D.C. 1957), *aff'd*, 252 F.2d 861, 116 USPQ 428 (D.C. Cir. 1958). A claimed signal is not matter, but a form of energy, and therefore is not a composition of matter.

The Supreme Court has read the term "manufacture" in accordance with its dictionary definition to mean "the production of articles for use from raw or prepared materials by giving to these materials new forms, qualities, properties, or combinations, whether by hand-labor or by machinery." *Diamond v. Chakrabarty*, 447 U.S. 303, 308, 206 USPQ 193, 196-97 (1980) (quoting *American Fruit Growers, Inc. v. Brogdex Co.*, 283 U.S. 1, 11, 8 USPQ 131, 133 (1931), which, in turn, quotes the *Century Dictionary*). Other courts have applied similar definitions. See *American Disappearing Bed Co. v. Arnaelsteen*, 182 F. 324, 325 (9th Cir. 1910), *cert. denied*, 220 U.S. 622 (1911). These definitions require physical substance, which a claimed signal does not have. Congress can be presumed to be aware of an administrative or judicial interpretation of a statute and to adopt that interpretation when it re-enacts a statute without change. *Lorillard v. Pons*, 434 U.S. 575, 580 (1978). Thus, Congress must be presumed to have been aware of the interpretation of manufacture in *American Fruit Growers* when it passed the 1952 Patent Act.

A manufacture is also defined as the residual class of product. 1 Chisum, § 1.02[3] (citing *W. Robinson, The Law of Patents for Useful Inventions* 270 (1890)).

A product is a tangible physical article or object, some form of matter, which a signal is not. That the other two product classes, machine and composition of matter, require physical matter is evidence that a manufacture was also intended to require physical matter. A signal, a form of energy, does not fall within either of the two definitions of

manufacture. Thus, a signal does not fall within one of the four statutory classes of § 101.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1,3,5,8,10,12,15,17,19 are rejected under 35 U.S.C. 102(e) as being anticipated by Teng et al. ('Teng' hereinafter) (Patent Number 6,944,615).

As per claim 1, Teng teaches

“checking, before accessing the data object, whether the ID is contained in a lock object and the ID is associated with a storage location” (column 3, lines 32-45);

“and accessing the data object, if the ID is not contained in the lock object or if the ID is not yet associated with a storage location” (if no X-lock, column 3, lines 32-45).

As per claim 3, Teng teaches

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“the lock object comprises a table, having a column for the ID and a column for a link to the storage location associated with the ID” (column 7, lines 36-48; lock table, figure 4(b)).

As per claim 5, Teng teaches

“the data object comprises one or more fields of one or more tables and wherein the ID comprises one or more key fields of the one or more tables” (column 2, lines 24-34).

As per claim 8, Teng teaches

This claim is rejected on grounds corresponding to the arguments given above for rejected claim 1 and is similarly rejected.

As per claim 10, Teng teaches

This claim is rejected on grounds corresponding to the arguments given above for rejected claim 3 and is similarly rejected.

As per claim 12, Teng teaches

This claim is rejected on grounds corresponding to the arguments given above for rejected claim 5 and is similarly rejected.

As per claim 15, Teng teaches

This claim is rejected on grounds corresponding to the arguments given above for rejected claim 1 and is similarly rejected.

As per claim 17, Teng teaches

This claim is rejected on grounds corresponding to the arguments given above for rejected claim 3 and is similarly rejected.

As per claim 19, Teng teaches

This claim is rejected on grounds corresponding to the arguments given above for rejected claim 5 and is similarly rejected.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2,4,9,11,16,18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teng et al. ('Teng' hereinafter) (Patent Number 6,944,615) as applied to claims 1,8,15 above, respectively, and further in view of Daynes (Patent Number 6,772,255).

As per claim 2,

Teng does not explicitly indicate "deleting the ID from the second lock object, if the ID is not yet associated with a storage location".

However, Daynes discloses "deleting the ID from the second lock object, if the ID is not yet associated with a storage location" (remove unused lock states, column 11, lines 1-10).

It would have been obvious to one of ordinary skill in the art to combine Teng and Daynes because using the steps of "deleting the ID from the second lock object, if the ID is not yet associated with a storage location" would have given those skilled in the art the tools to administer locking and unlocking resources. This gives the user the advantage of making sure that unused locks are cleared.

As per claim 4,

This claim is rejected on grounds corresponding to the arguments given above for rejected claim 3 and is similarly rejected.

As per claim 9,

This claim is rejected on grounds corresponding to the arguments given above for rejected claim 2 and is similarly rejected.

As per claim 11,

This claim is rejected on grounds corresponding to the arguments given above for rejected claim 3 and is similarly rejected.

As per claim 16,

This claim is rejected on grounds corresponding to the arguments given above for rejected claim 2 and is similarly rejected.

As per claim 18,

This claim is rejected on grounds corresponding to the arguments given above for rejected claim 3 and is similarly rejected.

7. Claims 6-7,13-14,20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teng et al. ('Teng' hereinafter) (Patent Number 6,944,615) as applied to claims 1 and above, and further in view of Bamford et al. ('Bamford' hereinafter) (Patent Number 6,772,255).

As per claim 6, Teng teaches

"the ID" (column 3, lines 32-45).

Teng does not explicitly indicate "before performing the check, storing ... in a second lock object, which is stored in a volatile storage means".

However, Bamford discloses “before performing the check, storing ... in a second lock object, which is stored in a volatile storage means” (W lock, column 5, lines 51-61).

It would have been obvious to one of ordinary skill in the art to combine Teng and Bamford because using the steps of “before performing the check, storing ... in a second lock object, which is stored in a volatile storage means” would have given those skilled in the art the tools to make sure a desired resource is locked in the appropriate mode. This gives the user the advantage of being able to obtain secondary or destination locks for safely moving data.

As per claim 7,

Teng does not explicitly indicate “checking, whether the ID has been successfully stored in the second lock object before accessing the data object and, if the ID has not been successfully stored in the second lock object, not accessing the data object”.

However, Bamford discloses “checking, whether the ID has been successfully stored in the second lock object before accessing the data object and, if the ID has not been successfully stored in the second lock object, not accessing the data object” (column 5, lines 51-61).

It would have been obvious to one of ordinary skill in the art to combine Teng and Bamford because using the steps of “checking, whether the ID has been successfully stored in the second lock object before accessing the data object and, if the ID has not been successfully stored in the second lock object, not accessing the data object” would have given those skilled in the art the tools to make sure a desired resource is locked in

the appropriate mode. This gives the user the advantage of being able to obtain secondary or destination locks for safely moving data.

As per claims 13-14,

These claims are rejected on grounds corresponding to the arguments given above for rejected claims 6-7 and are similarly rejected.

As per claims 20-21,

These claims are rejected on grounds corresponding to the arguments given above for rejected claims 6-7 and are similarly rejected.

As per claim 22, Teng teaches

“a structure for controlling access to a data object having an identifier (ID), the structure comprising a first lock object, storing the ID of the data object and a link to a storage location where the data object is stored” (column 7, lines 36-48; lock table, figure 4(b)),

“storing the ID of the data object” (column 7, lines 36-48; lock table, figure 4(b)).

Teng does not explicitly indicate “and a second lock object”.

However Bamford discloses “and a second lock object” (W lock, column 5, lines 51-61).

It would have been obvious to one of ordinary skill in the art to combine Teng and Bamford because using the steps of “and a second lock object” would have given those

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skilled in the art the tools to make sure a desired resource is locked in the appropriate mode. This gives the user the advantage of being able to obtain secondary or destination locks for safely moving data.

As per claims 23,

This claim is rejected on grounds corresponding to the arguments given above for rejected claim 3 and is similarly rejected.

As per claims 24,

This claim is rejected on grounds corresponding to the arguments given above for rejected claim 5 and is similarly rejected.

As per claims 25,

This claim is rejected on grounds corresponding to the arguments given above for rejected claim 5 and is similarly rejected.

As per claim 26, Teng teaches

"the first and second lock objects are created by a data moving or data archiving process" (column 5, lines 51-61).

Response to Arguments

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8. Applicant's arguments filed 6/30/06 have been fully considered but they are not persuasive.

With regards to the 35 U.S.C 101 issues, additional information has been provided above to the Applicant to help overcome these issues.

With regards to Applicant's arguments that neither Teng, Teng in view of Daynes, nor Teng in view of Bamford disclose "checking, before accessing the data object, whether the ID is contained in a lock object and the ID is associated with a storage location; and accessing the data object, if the ID is not contained in the lock object or if the ID is not yet associated with a storage location", it is noted that Teng does in fact teach "if the ID is not contained in the lock object" (column 3, lines 32-45). The Applicant should note that the claim states "or" which means that only one of the conditions has to be met, so the argument presented that Teng does not disclose accessing the data object if the ID is not yet associated with a storage location leaves out the other part of the "or" condition which is in fact met.

With regards to Applicant's arguments neither Teng nor Teng in view of Daynes disclose "the lock object comprises a table, having a column for the ID and a column for a link to the storage location associated with the ID", it is noted that Teng does disclose a transaction (column 7, lines 44-47) which contains a link to the target storage location, therefore the claim is in fact disclosed.

With regards to Applicant's argument that Teng in view of Bamford does not disclose "a first lock object, storing the ID of the data object and a link to a storage location where the data object is stored", it is noted that Teng does disclose a

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transaction (column 7, lines 44-47) which contains a link to the target storage location, therefore the claim is in fact disclosed.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

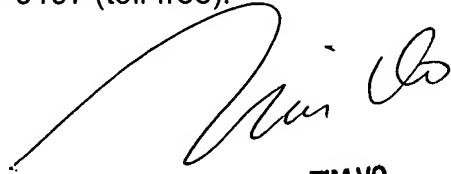
The prior art made of record, listed on form PTO-892, and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay A. Morrison whose telephone number is (571) 272-7112. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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